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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,670	03/17/2000	Ghun-up Cha	0630-0983P	2822

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EXAMINER

BOWES, SARA E

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/527,670

Applicant(s)

CHA ET AL.

Examiner

Sara Bowes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/05/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-33 is/are pending in the application.
 - 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Status

Claims 13-33 are pending in this office action, claims 1-12 are canceled and claims 13-33 are newly added.

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Rejections

The text of those sections of the Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claims 13-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,917,915 to Hirose in view of U.S. Patent No. 5,539,827 to Liu.

Referring to claim 13, Hirose teaches a method for decrypting an encrypted digital data file, comprising receiving the encrypted data file [figure 1, DATA RECEIVING APPARATUS 6].

Hirose does not teach a method for decrypting an encrypted digital data file, comprising:

- decrypting a portion of the received data file while leaving the remaining portion of the data file encrypted.

However, Liu discloses a method for decrypting an encrypted digital data file, comprising:

- decrypting a portion of the received data file while leaving the remaining portion of the data file encrypted [column 9, lines 51-52].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Liu's teaching of partial decrypting to the system and method of Hirose, such that Hirose's data receiving apparatus 6 of figure 1 would include the decryption device figure 5 of Liu. One would have been motivated to modify Hirose's system as such in order to provide use of secure data to only authorized users by deterring cipher-attack methods because unauthorized users are faced with researching a data storage unit of indeterminable size [column 4, lines 1-2].

Referring to claim 14, Hirose as modified teach the method of claim 13, wherein the partial decryption of the received data file is performed at a plurality of locations spaced apart at a predetermined interval on the digital data file [figure 8, column 11, lines 1-3 of Hirose].

Referring to claim 15, Hirose as modified teach the method of claim 13, further comprising storing the partially decrypted data file in a data storage medium or a digital data player [column 9, lines 18-21 of Hirose].

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Referring to claim 16, Hirose as modified teach the method of claim 13, further comprising decrypting the remainder of the partially decrypted data file [column 9, lines 24-28 of Hirose].

Referring to claim 17, Hirose as modified teach the method of claim 13, wherein the received data file is partially decrypted based on a predetermined encryption key [column 9, lines 30-32 of Hirose].

Referring to claim 18, Hirose as modified teach the method of claim 15, further comprising reading the stored data file from the data storage medium or digital data player and reproducing the data file at the request of a user [column 9, lines 22-28 of Hirose].

Referring to claim 19, Hirose as modified teach the method of claim 18, further comprising decrypting the data file based on a predetermined encryption key, and outputting the decrypted data file to an output line [column 9, lines 30-32, 44-46 of Hirose].

Referring to claim 20, Hirose as modified teach the method of claim 14, wherein the predetermined interval is a multiple or divisor of a buffer size [column 11, lines 46-53 of Liu].

Referring to claim 21, Hirose teaches a digital data decryption apparatus comprising:

a receiving unit for receiving an encrypted digital data file [figure 1, DATA RECEIVING APPARATUS 6].

Hirose does not teach a digital data decryption apparatus comprising:

- a decryption unit for decrypting a portion of the encrypted data file while leaving the remaining portion of the data file encrypted.

However, Liu discloses a digital data decryption apparatus comprising:

- a decryption unit for decrypting a portion of the encrypted data file while leaving the remaining portion of the data file encrypted [column 9, lines 51-52].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Liu's teaching of partial decrypting to the system and method of Hirose, such that Hirose's data receiving apparatus 6 of figure 1 would include the decryption device figure 5 of Liu. One would have been motivated to modify Hirose's system as such in order to provide use of secure data to only authorized users by deterring cipher-attack methods because unauthorized users are faced with researching a data storage unit of indeterminable size [column 4, lines 1-2].

Referring to claim 22, Hirose as modified teach the apparatus of claim 21, wherein the partial decryption of the received data file is performed at a plurality of locations spaced apart at a predetermined interval on the digital data file [figure 8, column 11, lines 1-3 of Hirose].

Referring to claim 23, Hirose as modified teach the apparatus of claim 22, wherein the predetermined interval is a multiple or divisor of a buffer size [column 11, lines 46-53 of Liu].

Referring to claim 24, Hirose as modified teach the apparatus of claim 21, further comprising a data storage medium for storing the partially decrypted data file [column 9, lines 18-21 of Hirose].

Referring to claim 25, Hirose as modified teach the apparatus of claim 21, wherein the received data file is partially decrypted based on a predetermined encryption key [column 9, lines 30-32 to Hirose].

Referring to claim 26, Hirose as modified teach the apparatus of claim 21, wherein the decryption unit subsequently decrypts the remainder of the partially decrypted data file [column 9, lines 24-28 to Hirose].

Claims 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,917,915 to Hirose in view of U.S. Patent No. 5,539,827 to Liu in further view U.S. Patent No. 5,867,579 to Saito.

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Referring to claim 27, Hirose teaches a method for decrypting an digital data file, comprising receiving the encrypted data file [figure 1, DATA RECEIVING APPARATUS 6].

Hirose does not teach a method for decrypting an digital data file, comprising:

- decrypting a portion of the received data file while leaving the remaining portion of the data file encrypted;

However, Liu discloses a method for decrypting an digital data file, comprising:

- decrypting a portion of the received data file while leaving the remaining portion of the data file encrypted [column 9, lines 51-52];

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Liu's teaching of partial decrypting to the system and method of Hirose, such that Hirose's data receiving apparatus 6 of figure 1 would include the decryption device figure 5 of Liu. One would have been motivated to modify Hirose's system as such in order to provide use of secure data to only authorized users by deterring cipher-attack methods because unauthorized users are faced with researching a data storage unit of indeterminable size [column 4, lines 1-2].

Hirose and Liu do not disclose a method for decrypting an digital data file, comprising:

- storing the decrypted data file in a buffer; and
- reencrypting the decrypted data file.

However, Saito discloses a method for decrypting an digital data file, comprising:

- storing the decrypted data file in a buffer [column 19-22]; and

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- reencrypting the decrypted data file [column 19, lines 19-22].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Saito's teachings of storing the decrypted data in a file buffer until reencrypting to the system and method of Hirose as modified, such that the data receiving apparatus figure 6 of Hirose would be replaced with the RE-ENCRYPTION device 50 of figure 5 of Saito. One would have been motivated to modify Hirose and Liu's system as such to provide for secure storage for sensitive data.

Referring to claim 28, Hirose as modified teach the method of claim 27, wherein the partial decryption of the received data file is performed at a plurality of locations spaced apart at a predetermined interval on the digital data file [figure 8, column 11, lines 1-3 of Hirose].

Referring to claim 29, Hirose as modified teach the method of claim 27, further comprising storing the received encrypted data file in a data storage medium of a digital data player [column 9, lines 18-21 of Hirose].

Referring to claim 30, Hirose as modified teach the method of claim 27, further comprising decrypting the remainder of the partially decrypted data file [column 9, lines 24-28 of Hirose].

Referring to claim 31, Hirose as modified teach the method of claim 27, wherein the received data file is partially decrypted based on a predetermined encryption key [column 9, lines 30-32 of Hirose].

Referring to claim 32, Hirose as modified the method of claim 29, further comprising reading the stored data file from the data storage medium and reproducing the data file at the request of a user [column 9, lines 22-28 of Hirose].

Referring to claim 33, Hirose as modified teach the method of claim 32, further comprising decrypting the data file based on a predetermined encryption key, and outputting the decrypted data file to an output line [column 9, lines 30-32, 44-46 of Hirose].

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Bowes whose telephone number is 703-305-0326. The examiner can normally be reached on 7:30-4:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

seb
3/23/2004


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